dimensions on this route would be sufficient to justify its construction at the probable cost?

In answer we say, that if there were not a canal of superior dimensions leading to rival markets; and there were no practicable routes upon which a canal could be constructed to such rival markets; and those markets were not within comparatively a short distance;—in other words, if trade coming to the mouth of Seneca were *forced* to pass over this canal, then we should answer in the affirmative, but as things are, in the negative. (We understand the committee as, of course, supposing a sufficiency of water.) At the same time we admit that this is a question not entirely within the province of an Engineer or Engineers to determine.

We will place others in possession of facts so far as they are to be learned from the Engineer:—

Upon the principle of calculation fully explained in our report, (see page 48, 49, &c.) The actual distance from Seneca, by the Seneca route, to Baltimore, with its 761 feet of lockage and a canal 50 feet wide, is equivalent in time, or equated distance, to 136 miles in length, of a level sixty feet wide canal, without locks.

In the same way, in equated distance, the mouth of Seneca to Georgetown is 32 miles; and to Baltimore by the way of Georgetown 91 miles. It is not a question for an Engineer to settle which market a boat would seek in preference; the one 32 miles; or the one 136 miles distant; for the Engineer is not necessarily acquainted with the relative inducements that the two markets may offer to draw trade, each to itself. Neither is it a question for an Engineer to decide whether, all things considered, the difference of 45 miles in the two routes by Georgetown, and by Seneca, to Baltimore does not give a preference to the former, in reference to the interests of Baltimore herself.

25th Interrogatory—What reduction in the annual supply of water required on the Seneca route would be made by narrowing the canal from fifty to forty feet water surface, and what would be the consequent reduction on the cost of construction?

Answer—The amount of lockage water and lockgate leakage would be the same on both the forty and fifty feet canals. The leakage of the two canals would be very nearly alike. Almost the only difference as regards expense of water, would be in the evaporation from the 10 feet difference in width of surface, which, for the 12 miles, the length of the Seneca Canal dependent upon the summit for water, cannot exceed 75,000 cubic yards annually, an amount comparatively a mere trifle. The difference then, as regards expense of water, between a canal of 40 feet water surface, and one of fifty feet, we consider as practically nothing.—There would probably be a very considerable difference in the cost of the two canals, but for reasons already given we cannot say how great that difference would be.

We will remark, that the bottom of the 40 feet canal would not be